
Chapter 1: Benefits of Greenways



McConnell Springs

The benefits of a comprehensive greenway system go far beyond leisure and aesthetics. A multi-objective greenway system for Lexington-Fayette County, Kentucky can address and resolve many community issues that affect the future environmental and economic health of the community. Greenways, as part of the greenspace system, are not luxuries, but necessities for maintaining the quality of life that Bluegrass residents have always enjoyed and desire for the future. Greenways have been implemented by other communities to provide for mitigation of flooding, protection of water quality, conservation of wetlands, protection of wildlife habitat, development of recreation opportunities, provision of alternative transportation and buffering of adjacent land uses. Greenways typically incorporate varying types and intensity of human use, including trails for recreation and alternative transportation. Greenways have also been shown to increase the value of adjacent private properties as an amenity to residential and commercial developments. These and other benefits

of a Lexington-Fayette County greenway network are described in the following pages.

1.1. WATER QUANTITY AND WATER QUALITY BENEFITS

Greenways often preserve wooded open spaces along creeks and streams, which absorb floodwaters and filter pollutants from stormwater. Flooding has historically been a significant problem in many parts of Lexington-Fayette County. In some areas, buildings and other land uses have encroached into flood prone areas. By designating floodplains as greenways, the encroachments can be better managed, and in some cases, replaced with linear open space that serves as an amenity for adjacent residential and commercial property owners, as well as providing important flood water storage capacity.

As a flood control measure, greenway corridors serve as a primary storage zone during periods of heavy rainfall. The protected floodplain can also be

used during non-flood periods for other activities, including recreation and alternative transportation. In conjunction with existing stormwater management policies and programs implemented in the community, greenway lands can be established as development occurs. The savings realized in reduced flood damage claims can offset the expense associated with the establishment of the greenway system. Additionally, for those residents who are required to purchase flood insurance, implementation of a community-wide greenway system in Lexington-Fayette County could result in reduced flood insurance rates.

Greenway corridors also serve to improve the surface water quality of local rivers and creeks. Water quality impairment, in many cases, is due to the effects of urban development or agricultural practices. Stream channelization, erosion, surface runoff and tree cover removal result in adverse impacts on water chemistry, riparian vegetation and wildlife habitat.

The floodplain forests and wetlands contained within greenway corridors filter pollutants from stormwater. Removal of these pollutants is impaired if stormwater is collected in pipes and discharged directly into local streams and rivers. Improving surface water quality in streams through preservation of the floodplain and wetland areas not only benefits local residents, but also numerous forms of wildlife that depend on streams for their habitat.



1.2. PLANT AND ANIMAL HABITAT BENEFITS

Forests, woodlands and riparian zones are some of the most effective tools known to protect and maintain the natural environment. Trees clean the air by removing noxious gases and particulates, such

as dust and pollen. They absorb carbon dioxide, whose excessive buildup in the atmosphere may cause long-term increases in the earth's temperature. Greenway corridors can serve as viable habitat for many species of plants and wildlife. They provide essential food and water sources, shelter, nesting sites and protection for birds and animals. Additionally, greenway corridors in Lexington-Fayette County could become primary migratory corridors for terrestrial wildlife, serving to help maintain the integrity of many plant and animal gene pools. Some wildlife biologists have extolled greenways as future "gene-ways" and have determined that migration routes that often follow river and stream corridors are essential to maintaining healthy wildlife populations. Greenways in Lexington-Fayette County can be targeted as primary habitats for many species of plants and animals. Programs can be established, not only to protect the valuable existing forested and wetland areas of the community, but also to reclaim and restore streams to support higher quality habitat.

1.3. TRANSPORTATION AND AIR QUALITY BENEFITS

In past years, most American communities have grown in a sprawling, suburban form as a result of dependence upon the automobile as the sole means of transportation. This dependence has resulted in traffic congestion, air pollution, and a disconnection with the community that a pedestrian-based system offered. Americans have abandoned some traditional forms of transportation (such as biking and walking), and have been slow to improve other forms of transportation (such as bicycle and pedestrian networks and public transit). In order to provide relief from congested streets and highways in Lexington-Fayette County, future transportation planning and development should concentrate on providing local residents a choice in different modes of travel. For alternative transportation plans to be successful, they must offer facilities with the same benefits and appeal that transportation planners strive to achieve in conventional road design: efficiency, safety, comfort, reliability, flexibility and an enjoyable traveling experience.

Greenway corridors throughout Lexington-Fayette County can serve as extensions of the road network, offering realistic and viable connections between origins and destinations, such as work, schools, libraries, parks, shopping areas and tourist

attractions. Greenway facilities can also be integrated into the mass transportation system by connecting at bus stops and using the Bike 'n Ride program. Greenway-based bikeways and walkways are most effective for certain travel distances. National surveys by the Federal Highway Administration have shown that Americans are willing to walk as far as two miles to a destination, and bike as far as five miles. It is easily conceivable that destinations can be linked to multiple origins throughout the community with a combination of off-road trails and on-road bicycle and pedestrian facilities.



Source: Pedestrian and Bicycle Information Center

Greenways provide bicyclists and walkers a viable, safe and pleasurable alternative to vehicular traffic. Since motorized vehicles are major sources of urban air pollution, offering alternative transportation choices through greenways would reduce automobile use, traffic congestion and automobile emissions. Also, many greenways are dominated by trees, which provide one of the most effective means of improving air quality. Though technology has and will continue to reduce vehicle pollution, there are more vehicles on the road, and thus more miles driven than ever before. It is likely that this trend will continue.

1.4. HEALTH AND RECREATION BENEFITS

In 1987, the President's Commission on Americans Outdoors released a report that cited limited access to outdoor resources as a growing problem for quality of life throughout the nation. The Commission recommended that a national system of greenways could provide all Americans with access to linear open space resources. In December of 2001, the Surgeon General declared that some 300,000 Americans die each year from illnesses

caused or worsened by obesity. Soon obesity will overtake tobacco as the chief cause of preventable deaths. The report recommends that schools, communities and industry work towards reversing this trend.

Greenways enable more people to walk or bike, thus improving the health of residents. Studies have shown that as little as 30 minutes a day of moderate-intensity exercise (such as bicycling, walking, in-line skating or horseback riding) can significantly improve a person's mental health by reducing stress and depression. It also enhances physical health by reducing the risk of coronary heart disease, stroke, certain types of cancer, high blood pressure, diabetes, osteoporosis and obesity. Exercise can also be an effective tool for battling the aging process and aids in the rehabilitation of injury and disease.

Providing opportunities for outdoor activities near hospitals, schools, and close to where people live and work is an important component of promoting healthy lifestyles for Lexington-Fayette County residents. Trail systems within greenways and parks can provide opportunities for primary recreation, physical rehabilitation and fitness.

1.5. SAFETY BENEFITS

As an alternative transportation corridor, a greenway is designed to provide a safer and more user-friendly means of travel for pedestrian/bicycle users than is normally found in standard roadway design. Safety and accessibility are important issues in the planning, design and management of greenways. Following federal, state and local standards for public safety and use are part of greenway development. It has also been proven in statistics and reports from numerous communities across the nation that greenways typically are safe from criminal activity.



1.6. CULTURAL AND HISTORIC BENEFITS

Greenways can enhance the culture and protect many of the historic resources in Lexington-Fayette County. Successful greenway projects across the United States have served as new "main streets," where neighbors meet, children play, and community groups gather to celebrate. For cities large and small, greenways have become a cultural asset and focal point for community activities. Some communities sponsor "greenway days" to celebrate the outdoors and local traditions. Various walking and running events are also held on greenways to support charities or extend traditional sporting events. Many civic groups adopt segments of greenways for maintenance or environmental awareness programs. Some greenways, like San Antonio's Riverwalk, are the focal point not only for community activities, but also for economic development.

The richness and diversity of Lexington's historic resources are represented by the listings on the National Register of Historic Places and other locally significant sites and historic districts. The interpretation of historic and archaeological sites along greenways can serve to increase the awareness and appreciation of Lexington-Fayette County's rich physical and cultural heritage. Greenways can also be a vehicle to provide controlled public access to important cultural sites in a manner that promotes preservation and enhances interpretive opportunities.

1.7. ECONOMIC BENEFITS

Case studies performed by the U.S. Department of Transportation have shown that trails often increase the property value of adjacent real estate, provide tourist income for communities, spur the development of new businesses, increase sales tax revenues and create new jobs to serve trail users.

Research has shown that greenways can raise the value of adjacent properties by as much as 5 to 20 percent. For example, in a new residential development in the Gleneagles and McConnell's Trace Subdivisions, new lots situated on greenways were priced higher and sold faster than comparable lots off of the greenway. Many home-buyers and corporations are looking for real estate that provides direct access to public and private greenway systems. Greenways are viewed as amenities by commercial and office park developers as well, who in turn, are realizing higher rental values and profits. American

LIVES, a real estate research firm, completed a national study of the top reasons that people choose their new home. Walking and biking paths are viewed as extremely important to 74% of buyers nationally: outweighed only by "low traffic and quiet streets" and "lots of natural, open space".

Tourism is currently ranked as the number one economic sector in the world. In several states, regions, and localities throughout the nation, greenways have been specifically created to capture the tourism potential of a regional landscape or cultural destination. The State of Missouri, for example, spent \$6 million to create the regional, 200-mile KATY Trail State Park, which in its first full year of operation, generated travel and tourism dollars exceeding the state's expenses.

Other economic benefits to the community are realized through savings in public services and infrastructure. Greenways facilitate in promoting a healthy population, which in turn, can lead to reduced health care costs and enhanced productivity in the work place. Additionally, greenways can save local tax dollars by decreasing infrastructure costs associated with vehicular transportation (road construction, maintenance, and air quality), stormwater management (flood control) and environmental degradation (water quality, displacement of wildlife and revegetation costs).

Greenways also enhance stewardship by utilizing land that would have been otherwise categorized as vacant or considered wasteland. See Appendix D for further discussion on the economic benefits of greenways.



Weisenberger Mill